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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/448,301	11/24/1999	HIROSHI YAMAGUCHI	1110-0258P	4884

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BIRCH STEWART KOLASCH & BIRCH LLP
P O BOX 747
FALLS CHURCH, VA 220400747

EXAMINER
DO, ANH HONG

ART UNIT	PAPER NUMBER
2624	

DATE MAILED: 03/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	Applicant(s)
09/448,301	Yamaguchi
Examiner	**Art Unit**
Anh Hong Do	2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *Jan 2, 2003* .

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-18* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
4) ☐ Interview Summary (PTO-413) Paper No(s). _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 2 and 14-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Takahashi (U.S. Patent No. 5,940,824).

Regarding claim 15, Takahashi discloses:

- a storage device for storing compressed image data, said storage device including the image database (Fig. 1: main image file D4);

- a retrieval device for retrieving said image while said compressed image data is in a compressed state (Fig. 1: search unit 12);

- wherein said storage device stores image data after said image is split into a plurality of regions and wherein said retrieval device performs retrieval of said compressed image data after said image data in regions which are in a point symmetry relation with each other about the center of said image are unified (col. 7, lines 31-35).

Regarding claim 16, Takahashi discloses:

- an image processing device for subjecting image or image data thereof to image processing (Fig. 1: scanner 21 and image input);

- a setting device for setting said image processing which said image processing device performs in accordance with image or image data thereof (Fig. 1: keyword application unit 18 or compression processing unit 15);

- a storage device stores compressed image data of said image data and information of the image under a correspondence therebetween (Fig. 1: main image file D4 storing compressed image data outputted from compression processing unit 15 and information outputted from

keyword application unit 18 under a correspondence therebetween), wherein said storage device stores image data after said image is split into a plurality of regions (col. 7, lines 31-35);

- a retrieval device for retrieving said image while said compressed image data is in a compressed state (Fig. 1: search unit 12), wherein said retrieval device performs retrieval of said compressed image data after said image data in regions which are in a point symmetry relation with each other about the center of said image are unified (col. 7, lines 31-35).

Regarding claims 2 and 14, Takahashi teaches:

- a compression device for compressing image data to produce said compressed image data (Fig. 1: compression processing unit 15).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1, 3-13, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi (U.S. Patent No. 5,940,824) in view of Otto (U.S. patent No. 6,244,514).

Regarding claim 1, Takahashi discloses:

- a storage device for storing compressed image data, said storage device including the image database (Fig. 1: main image file D4);

- a retrieval device for retrieving said image while said compressed image data is in a compressed state (Fig. 1: search unit 12);

- a compression device for compressing image data to produce said compressed image data (Fig. 1: compression processing unit 15).

Takahashi does not specifically teach normalization of the image data prior to compression of said image data. One skilled in the art would have clearly recognized that in the Takahashi system, the data volume can be reduced in data retrieval (col. 14, lines 4-8).

Otto, in the same field of endeavor, teaches:

- normalizing the image data prior to compression, in which the number of possible maps is reduced (col. 9, lines 10-18).

Therefore, it would have been obvious to normalize the image data in Takahashi as taught by Otto in order to reduce the data volume in the data retrieval.

Regarding claim 3, Takahashi does not specifically teach normalization of the image data prior to compression of said image data. One skilled in the art would have clearly recognized that in the Takahashi system, the data volume can be reduced in data retrieval (col. 14, lines 4-8).

Otto, in the same field of endeavor, teaches:

- normalizing the image data prior to compression, in which the number of possible maps is reduced (col. 9, lines 18).

Therefore, it would have been obvious to normalize the image data in Takahashi as taught by Otto in order to reduce the data volume in the data retrieval.

Regarding claim 4, Takahashi teaches:

- wherein said storage device stores said compressed image data and information of the image under a correspondence therebetween (Fig. 1: main image file D4 storing compressed image data outputted from compression processing unit 15 and information outputted from keyword application unit 18 under a correspondence therebetween).

Regarding claim 5, Takahashi teaches:

- wherein said information of a correspondence image is read from said data base in accordance with a result retrieved by said retrieval device (Fig. 1: information of a correspondence image is read from said data base D4 in accordance with a result retrieved by said retrieval device 12).

Regarding claim 6, Takahashi teaches:

- wherein said storage device stores image data after said image is split into a plurality of regions and wherein said retrieval device performs retrieval of said compressed image data after said image data in regions which are in a point symmetry relation with each other about the center of said image are unified (col. 7, lines 31-35).

Regarding claim 7, Takahashi teaches:

- compressed image data comprises spatial coefficients of a luminance signal and a color difference signal (col. 8, lines 31-35).

Regarding claim 8, Takahashi teaches:

- comparing the spatial coefficients of the luminance signal up to a specified order with each other to select objects to be retrieved (col. 7, lines 43-49), and thereby comparing the spatial coefficients of the color difference signal of the thus selected objects to be retrieved to another specified order with each other, and retrieval by comparing the spatial coefficients of the luminance signal up to a higher order than the previously specified order with each other (col. 11, lines 28-42).

Regarding claim 9, Takahashi teaches wherein said retrieval device performs priority ranking of said compressed image data to be candidate (col. 11, lines 11-20).

Regarding claim 10, Takahashi teaches:

- after said compressed image data is extended, one or more images are represented as visible images in accordance with the result of said priority ranking (Fig. 5 shows the visible images and Fig. 6 shows retrieval result after expanding the compressed image).

Regarding claim 11, Otto teaches:

- said information is at least one of image data of the image of interest and information of image processing to which the image of interest is subjected (col. 7, lines 47-53).

Regarding claim 12, Takahashi discloses:

- an image processing device for subjecting image or image data thereof to image processing (Fig. 1: scanner 21 and image input);

- a setting device for setting said image processing which said image processing device performs in accordance with image or image data thereof (Fig. 1: keyword application unit 18 or compression processing unit 15);

- a storage device for storing compressed image data (Fig. 1: main image file D4);

- a retrieval device for retrieving said image while said compressed image data is in a compressed state (Fig. 1: search unit 12);

- a compression device for compressing image data to produce said compressed image data (Fig. 1: compression processing unit 15).

Takahashi does not specifically teach normalization of the image data prior to compression of said image data. One skilled in the art would have clearly recognized that in the Takahashi system, the data volume can be reduced in data retrieval (col. 14, lines 4-8).

Otto, in the same field of endeavor, teaches:

- normalizing the image data prior to compression, in which the number of possible maps is reduced (col. 9, lines 10-18).

Therefore, it would have been obvious to normalize the image data in Takahashi as taught by Otto in order to reduce the data volume in the data retrieval.

Regarding claim 13, Takahashi teaches:

- when said information of the image processing corresponding to said image retrieved by said retrieval device is read out in accordance with an instruction for reprocessing said image or image data thereof, said setting device reproduces said image processing to which said image or

said image data thereof has previously been subjected using the thus read information of said image processing (col. 5, lines 7-22).

Regarding claims 17 and 18, Otto teaches wherein said normalization is performed so that the averages of the compressed image data become equal to each other (col. 9, lines 10-18, teaches the mean is equal to the pixel values of the image data).

Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh Hong Do whose telephone number is (703) 308-6720.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700 or 4750. The fax phone number for this Group is (703) 872-9314.

March 19, 2003.